

FOSSIL RECORD OF A VARANID FROM THE DARLING DOWNS, SOUTHEASTERN QUEENSLAND. *Memoirs of the Queensland Museum* 38(1):92. 1995:- Knowledge of the fossil lacertilians of Queensland is scant. (Molnar, 1991). In Queensland, fossil varanids are known from the Darling Downs, Riversleigh, Dry River, Tea Tree Cave, "Glen Garland" swamp deposits, and unnamed beds at Floraville, Cape River and Springsure. (Molnar, 1991: 669-671). Material is registered at the Queensland Museum.

Two vertebrae in the fossil varanid collection were found to be unlike those of *Megalania* but similar to caudal vertebrae of water monitors. These fossils lack precise collection data but have characteristic preservation typical of material from Plio-Pleistocene sites of the Chinchilla Rifle Range and numerous sites from King Creek. Furthermore, they were boxed with *Megalania* vertebrae labelled 'C20'; indicating a Chinchilla Rifle Range locality. Thus the fossils are most probably from either the eastern or western Darling Downs. This material further documents the existence of varanids other than *Megalania* on the Darling Downs.

These vertebrae are easily referred to *Varanus* due to their general form; differing in size from, and lacking the robust

base of the neural spine evident in *Megalania* vertebrae. They were compared with those from several extant *Varanus* species (Table 1).

Similarities with *V. mertensi* are obvious (Table 1) but strong similarities also exist with *V. panoptes*. Given limited comparative material; and the similarity of caudals of the two groups. I am restricted to the conclusion that the fossils belong to a species related to *V. mertensi* or *V. panoptes*. Both of these species live in well-watered conditions unlike those existing today on the Darling Downs.

Acknowledgement

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Literature Cited

MOLNAR, R. E. 1991. Fossil reptiles in Australia. Pp. 605-702 In Vickers-Rich, P., Monaghan, J. M., Baird, R. F. & Rich, T. H. (eds.), *Vertebrate Palaeontology of Australasia*. (Pioneer Design Studio: Lilydale).

Joanne Wilkinson, Queensland Museum, PO Box 3300, Brisbane, Queensland 4101, Australia; 23 February 1995.

TABLE 1. Comparison of key characters with selected modern *Varanus* spp. O= present, X= absent, *= not available

Characters	<i>Varanus</i> spp.						
	Modern					Fossil	
	<i>V. giganteus</i> QMJ17565	<i>V. mertensi</i> QMJ46280	<i>V. panoptes</i> QMJ48291	<i>V. salvator</i> QMJ14498	<i>V. varius</i> QMJ15361	QMF31815	QMF31816
neural spine vertical	*	o	o	x	x	o	o
ratio of neural spine height to central length 0.5-0.8	x	o	o	x	x	o	o
anterior tip of neural spine wedge shaped and laterally erenulated	x	o	x	x	x	o	tip eroded
neural spine slightly constricted basally	o	o	o	o	o	o	o
anterior margin of neural spine near midline of centrum	x	o	o	o	o	x	o
ridge from neural spine to prezygapophisal processes forms a triangular basin	*	o	o	o	o	o	o
two sharp ridges enclosing central groove on ventral surface of centrum	*	o	x	x	o	o	x
zygapophisal facets oriented between 35-45°	*	o	o	o	x	o	o
transverse process on central caudal declined	*	o	x	x	o	o	o